

## ABSTRACT

An electrical distribution board that stores terminals of a signal cable connected to a communication network and an electrical power cable connected to an electrical distribution cable, the electrical distribution board comprising: an in-building electrical distribution breaker inserted between the electrical power cable and the in-building distribution cable; a gateway that interfaces the communication network with the in-building network; and a plurality of optical repeaters, each having a bi-directional conversion function between an electrical signal and an optical signal between an electrical signal input/output terminal and an optical signal input/output terminal, and having an electrical signal input/output terminal that is connected to an electrical signal input/output terminal for in-building network connection of the gateway, wherein the optical signal input/output terminal is connected to an optical fiber cable of the in-building network. In addition, junction boxes, outlet boxes, plugs with electrical codes, outlet box terminal boards, table taps and the like are prepared to form an in-building network. In-building equipment can be connected to the outlet boxes and the table taps.